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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/676,750	10/01/2003	Christopher Patterson	2802-152-023	7932

7590 12/06/2004

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Cleveland, OH 44124-4141

EXAMINER
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TOLAN, EDWARD THOMAS

ART UNIT	PAPER NUMBER
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3725

DATE MAILED: 12/06/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/676,750

Applicant(s)

PATTERSON ET AL.

Examiner

Tolan Edward

Art Unit

3725

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
  - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
  - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
  - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-9 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-9 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 10-01-2003.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_.

**DETAILED ACTION**

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1,2 and 4-9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sakakibara et al. (5,727,411) in view of Dole et al. (6,666,062). Sakakibara discloses a method of roll forming grooves in an aluminum workpiece (10) using three rolling tools (31,32,33). The rolling tools (31 and 32) have at least one protrusion (31b,32b) for simultaneously forming grooves at spaced areas along the workpiece. Roller (33) is a smoothing (supporting roller) or as disclosed in column 4, lines 52-54 is a finishing roller. Sakakibara does not disclose that the workpiece end is tapered and rounded. Dole teaches rolling tools (52,53, figures 5,5A) that form grooves (28) and taper and round (44,45) workpiece sections. It would have been obvious to one skilled in the art at the time of invention to provide the rolling tools of Sakakibara with a tapered and/or rounded portion as taught by Dole in order to provide the workpiece with an end that facilitates engagement with a fitting or other piping section. Regarding claim 7, it would have been obvious to the skilled artisan to provide a taper that closely matches the fitting that the workpiece is connecting to.

Claim 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over Sakakibara in view of Dole and further in view of Smith et al. (5,467,627). Sakakibara in

Art Unit: 3725

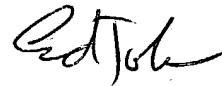
view of Dole does not disclose the rotational velocity. Smith teaches that it is known to rotate rolling tools (51) at between 200 and 5000 rpm. It would have been obvious to one skilled in the art at the time of invention to rotate the tools of Sakakibara in view of Dole at rotational speeds as taught by Smith in order to provide high speed processing.

***Conclusion***

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Any inquiry concerning this communication should be directed to Ed Tolan whose telephone number is 571-272-4525.

ED TOLAN  
PRIMARY EXAMINER

A handwritten signature in cursive script, appearing to read "Ed Tolan", is written below the printed name and title.